ABSTRACT .

In a non-aqueous electrolyte secondary battery, the reaction between the non-aqueous electrolyte and the electrode is suppressed to reduce a decrease in the discharge capacity with the charge/discharge cycle progress and the deterioration of battery characteristics during high-temperature storage. At least one of a chargeable and dischargeable positive electrode, a non-aqueous electrolyte containing a lithium salt, and a chargeable and dischargeable negative electrode in a non-aqueous electrolyte secondary battery contains at least one selected from the group consisting of a phosphate having three aliphatic hydrocarbon groups having 7 to 12 carbon atoms, a phosphate having two aliphatic hydrocarbon groups having 1 to 12 carbon atoms or an aromatic hydrocarbon group, and a phosphate having an aliphatic hydrocarbon group having 1 to 12 carbon atoms or an aromatic hydrocarbon group having 1 to 12 carbon atoms or an aromatic hydrocarbon group.

